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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,489	10/17/2001	Hans Detampel	41220-10047	7469
2292	7590	11/28/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PAHNG, JASON Y	
			ART UNIT	PAPER NUMBER
			3725	
DATE MAILED: 11/28/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/982,489

Applicant(s)

DETAMPEL, HANS

Examiner

Jason Y. Pahng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 5,6 and 12-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election with traverse of Species II, claims 1-4 and 7-11, in the reply filed on September 12 is acknowledged. The traversal is on the ground(s) that a reasonable number of species is set forth in the present application. This is not found persuasive because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement.

The requirement is still deemed proper and is therefore made FINAL.

### *Priority*

As set forth in the Office action dated December 1, 2004, applicant has not filed a certified copy of the application filed in Germany on October 17, 2000 as required by 35 U.S.C. 119(b).

### *Drawings*

Figure 2 is objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the equalizing systems (33, 33a) **between** a pre-freeze tunnel (31, 31a) and a main freeze tunnel (32, 32a) disclosed in [0040] must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

As set forth in the Office action dated December 1, 2004 and repeated below, the disclosure is objected to under 37 CFR 1.71, as being nonstatutory description. In the specification or drawings, there is no description of a device for optoelectronic monitoring and post-sorting means. The specification (page 12, line 15) discloses that the device separates the last remaining fiber contaminations. However, this is a mere

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invitation to invent. Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

Applicant argues that page 15 (line 12) to page 16 (line 2) of the specification describe optoelectronic monitoring. However, it appears there is no mention of optoelectronic monitoring in those pages.

The substitute specification filed on April 1, 2005 has been entered.

### ***Claim Objections***

The amendment overcomes the claim objections with regard to claim 4 made in the Office action dated December 1, 2004.

With regard to claim 3, what is the relationship between the freezing means and the second freezing means? Are they connected in series or in parallel?

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

As set forth in the Office action dated December 1, 2004, claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification. See the above objection to the specification.

Claims 2-4 and 7-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With regard to both claims 2 and 3, there is no disclosure of a pre-freeze tunnel and a main freeze tunnel arranged horizontally and parallel to each other. This is NEW MATTER. According to Figure 2, the pre-freeze tunnel and the main freeze tunnel are arranged in series and not in parallel.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 8, there is no antecedent basis for "the material separated" in line 2.

With regard to claim 9, a plurality of fine reducers are connected downstream of the pre-classifying system according to claim 1. How is a multi-stage classifying means arranged downstream with respect to the separators of the pre-classifying system?

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellers et al. (US 5,524,838) in view of Bonnet (US 5,368,240), Jokinen (US 6,209,812), and Quinn (US 3,622,089). Ellers discloses substantially all of the claimed structure including:

1. a multi-stage pre-reduction system (11, 13, Figure 1);
2. a freezing means (19); and
3. a pre-classifying system (23).

Ellers does not disclose that his freezing means comprise a multi-stage freeze means. Bonnet discloses a multi-stage freeze means (Figure 1) where a pre-cooling tunnel is added prior to a main cooling tunnel in order to improve the cooling or freezing process. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Ellers with a freezing means comprising a multi-stage freeze means in order to improve the cooling or freezing process, as taught by Bonnet.

Ellers also does not disclose a plurality of fine reducers arranged in parallel following the pre-classifying system. It is well known in the art to use fine reducers arranged in parallel following a pre-classifying system. For example, in a closely related art pertinent to the problem, both Jokinen and Quinn disclose a plurality of fine reducers (C2 and C3 – Jokinen; 171 and 172 – Quinn) arranged in parallel following a pre-

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classifying system in order to further reduce classified material. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Ellers (as modified) with a plurality of fine reducers arranged in parallel following a pre-classifying system in order to further reduce classified material, as taught by Jokinen and Quinn.

Claim 2-4, as well as can be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellers et al. (US 5,524,838) in view of Bonnet (US 5,368,240), Jokinen (US 6,209,812), and Quinn (US 3,622,089), further in view of Schorsch (US 4,084,387).

Claims 2 and 3 call for a temperature equalizing system located between the pre-freeze tunnel and the main freeze tunnel. In a closely related art, Schorsch discloses a cryogenic crushing system with a temperature equalizing or controlling system (column 5, lines 58-61) in order to equalize the temperature of the material. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Ellers (as modified) with a temperature equalizing system in order to equalize the temperatures of the material as taught by Schorsch. As for the system to be located between the pre-freeze tunnel and the main freeze tunnel, Schorsch teaches that the temperature equalizing system may be located virtually anywhere (300, 301, 302, 303, 304, and 305). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide the modified device of Ellers and Bonnet to locate the temperature equalizing system in any reasonable location as taught by



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Schorsch, including that of locating them between the pre-freeze tunnel and the main freeze tunnel.

Claims 2 and 3 also call for spraying liquid refrigerant onto the material. In a closely related art, Schorsch discloses a liquid refrigerant which is sprayed onto the material (column 4, lines 13-16) in order to improve the refrigerant coming into contact with the material. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Ellers (as modified) with a liquid refrigerant which is sprayed onto the material in order to improve the refrigerant coming into contact with the material, as taught by Schorsch.

Claims 2-4 call for the pre-freeze tunnel and the main freeze tunnel to be horizontally parallel. In a closely related art, Bonnet discloses a pair of horizontally parallel pre-freeze tunnel and the main freeze tunnel (Figure 2) in order to better utilize capacity (column 3, lines 36-40). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Ellers (as modified) with a pair of horizontally parallel pre-freeze tunnel and the main freeze tunnel in order to better utilize capacity, as taught by Bonnet.

### ***Allowable Subject Matter***

Claim 7-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and if the 35 U.S.C. 112 rejection is overcome.

### ***Response to Arguments***

Applicant's arguments filed on April 1, 2005 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Y. Pahng whose telephone number is 571 272 4522. The examiner can normally be reached on 9:00 AM - 7:00 PM, Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571 272 4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JYP

A handwritten signature in black ink, appearing to read 'Derris H. Banks', with a long horizontal line extending to the right.

**DERRIS H. BANKS**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3700**